

Claims: I claim:

1. A method for accessing information, computer programs and electronic communications across multiple computing devices using a portable graphical user interface (GUI) executing in a computer that is connected to a computer network comprising:
 - a. establishing a communication session between said computer and a server computer having means for supplying said GUI with configuration data, data objects, application objects, and other items necessary for the operation of said GUI;
 - b. presenting within a display device connected to said computer an initial presentation of said GUI containing a plurality of container objects that represent the root-level of a containment hierarchy that controls the presentation of all items contained within said container objects;
 - c. limiting the quantity of said container objects to be less than, or equal to, the maximum number of such container objects that can be recognizably presented by the display device of lowest pixel-resolution among other computer systems a typical user of said GUI would seek to operate, such operation including the execution, reproduction, and use of said GUI;
 - d. grouping, by groups of similar type and function, the object items, application objects, and other items said typical user of said GUI would seek to access within said GUI, the quantity of such groups being equal to the quantity of said container objects, and assigning each group of objects and items to a container object within the group of said container objects, such assignment

- establishing a second hierachal branch of said containment hierarchy extending from said containment hierarchy's root-level;
- e. further defining the hierachal distribution of object items, application objects, and other items contained within said container objects so that objects and items of similar type and function are organized into groups and subgroups, the organization of which is used to define further hierachal branches within said containment hierarchy, the objects and items then being distributed to those further hierachal branches;
 - f. further defining the hierachal distribution of object items, application objects, and other items contained within said container objects so that those objects and items that said typical user of said GUI would most frequently access when operating said GUI will be distributed to branches of said containment hierarchy that are closest to said containment hierarchy's root-level;
 - g. providing, within said container objects, means of navigating branches of said containment hierarchy thereby enabling a user of said GUI to access object items, application objects, and other items that are contained within said container objects;
 - h. controlling the presentation of said container objects within said initial representation so that each container object of the group of said container objects are displayed in a closed representation, said closed representation meaning that the contents of any container object displaying said closed representation are not visible to a user of said GUI, however, such container object is represented in a manner that allows its selection by said user operating a input device connected to said computer;
 - i. controlling the presentation of said container objects so that any container object within the group of said container objects, if

- displaying said closed representation, will be displayed in a open representation in response to a selection event generated by said user's selection of that container object by operation of said input device connected to said computer, said open representation meaning that the contents of any container object displaying said open representation are made visible to said user within that container object;
- j. controlling the presentation of said container objects so that any container object within the group of said container objects, if displaying said open representation, will be displayed in said closed representation in response to a selection event generated by said user's selection of a portion of that container object by using said input device connected to said computer;
 - k. providing means of executing and presenting, within said GUI, application objects retrieved by said GUI from said server computer;
 - l. providing means for receiving and transmitting electronic communications using said server computer and presenting and creating such communication within said GUI;
 - m. providing a means of scaling the visual representation of said GUI and all visual elements contained therein so that said GUI may be rendered with visual consistency in the display systems of a variety of computer systems;
 - n. providing means of storing configuration data, data objects, application objects, computer files and other items in the storage system of said server computer so that said user of said GUI will be able to manage portions of said hierarchy, store and retrieve computer files from said server, and configure operating parameters of said GUI that will persist when such a user operates said GUI at another time using said computer or using another

computer connected by said computer network to said server computer,

whereby said GUI may be operated across a wide range of computer devices and provide said user with access to information, computer programs and electronic communications.

2. The method of claim 1 wherein said container objects are represented as sliding panels within said GUI.
3. The method of claim 2 wherein each of said sliding panels includes, protruding from the edge of the panel that is closest to the central portion of said GUI, a thin, convex-shaped portion of said panel, the flatted side of the convex shape facing the interior of the panel, thus providing a typical user with a visual suggestion of a handle and psychological reinforcement for the concept that such a handle may be selected to slide such a panel.
4. The method of claim 3 wherein each of said thin, convex-shaped portions also presents an icon that has been chosen to represent the contents of the sliding panel of which it is part.
5. The method of claim 1 wherein said closed representation of any of said container objects is provided by changing the selected container object's representation so that a thin portion of its edge is exposed along the edge of said GUI, the exposed edge being the edge of the selected container object that was closest to the central portion of said GUI prior to said selection event.
6. An article of manufacture comprising:
a computer usable medium having computer readable program code embodied therein for accessing information, computer programs and electronic communications across multiple computing devices using a graphical user interface comprising:
 - a. computer readable program code configured to cause a computer to establish a communication session between said computer and

- a server computer having means for supplying said GUI with configuration data, data objects, application objects, and other items necessary for the operation of said GUI;
- b. computer readable program code configured to cause a computer to present within a display device connected to said computer an initial presentation of said GUI containing a plurality of container objects that represent the root-level of a containment hierarchy that controls the presentation of all items contained within said container objects;
 - c. computer readable program code configured to cause a computer to limit the quantity of said container objects to be less than, or equal to, the maximum number of such container objects that can be recognizably presented by the display device of lowest pixel-resolution among other computer systems a typical user of said GUI would seek to operate, such operation including the execution, reproduction, and use of said GUI;
 - d. computer readable program code configured to cause a computer to group by similar type and function, the object items, application objects, and other items said typical user of said GUI would seek to access within said GUI, the quantity of such groups being equal to the quantity of said container objects, and to assign each group of objects and items to a container object within the group of said container objects, and by such assignment establish a second hierachal branch of said containment hierarchy extending from said containment hierarchy's root-level;
 - e. computer readable program code configured to cause a computer to further define the hierachal distribution of object items, application objects, and other items contained within said container objects so that objects and items of similar type and

- function are organized into groups and subgroups, the organization of which is used to define further hierachal branches within said containment hierarchy, the objects and items then being distributed to those further hierachal branches;
- f. computer readable program code configured to cause a computer to further define the hierachal distribution of object items, application objects, and other items contained within said container objects so that those objects and items that said typical user of said GUI would most frequently access when operating said GUI will be distributed to branches of said containment hierarchy that are closest to said containment hierarchy's root-level;
 - g. computer readable program code configured to cause a computer to provide, within said container objects, means of navigating branches of said containment hierarchy thereby enabling a user of said GUI to access object items, application objects, and other items that are contained within said container objects;
 - h. computer readable program code configured to cause a computer to control the presentation of said container objects within said initial representation so that each container object of the group of said container objects are displayed in a closed representation, said closed representation meaning that the contents of any container object displaying said closed representation are not visible to a user of said GUI, however, such container object is represented in a manner that allows its selection by said user operating a input device connected to said computer;
 - i. computer readable program code configured to cause a computer to control the presentation of said container objects so that any container object within the group of said container objects, if displaying said closed representation, will be displayed in a open

- representation in response to a selection event generated by said user's selection of that container object by operation of said input device connected to said computer, said open representation meaning that the contents of any container object displaying said open representation are made visible to said user within that container object;
- j. computer readable program code configured to cause a computer to control the presentation of said container objects so that any container object within the group of said container objects, if displaying said open representation, will be displayed in said closed representation in response to a selection event generated by said user's selection of a portion of that container object by using said input device connected to said computer;
 - k. computer readable program code configured to cause a computer to execute and present, within said GUI, application objects retrieved by said GUI from said server computer;
 - l. computer readable program code configured to cause a computer to receive and transmit electronic communications using said GUI and said server computer, and to enable presentation and creation of such communications within said GUI;
 - m. computer readable program code configured to cause a computer to scale the visual representation of said GUI and all visual elements contained therein so that said GUI may be rendered with visual consistency in the display systems of a variety of computer systems;
 - n. computer readable program code configured to cause a computer to store configuration data, data objects, application objects, computer files and other items in the storage system of said server computer so that said user of said GUI will be able to manage portions of said hierarchy, store and retrieve computer

files from said server, and configure operating parameters of said GUI that will persist when such a user operates said GUI at another time using said computer or using another computer connected by said computer network to said server computer.

7. The article of manufacture claim 6 wherein said container objects are represented as sliding panels within said GUI.
8. The article of manufacture claim 7 wherein each of said sliding panels includes, protruding from the edge of the panel that is closest to the central portion of said GUI, a thin, convex-shaped portion of said panel, the flattened side of the convex shape facing the interior of the panel, thus providing a typical user with a visual suggestion of a handle and psychological reinforcement for the concept that such a handle may be selected to slide such a panel.
9. The article of manufacture claim 8 wherein each of said thin, convex-shaped portions also presents an icon that has been chosen to represent the contents of the sliding panel of which it is part.
10. The article of manufacture claim 6 wherein said closed representation of any of said container objects is provided by changing the selected container object's representation so that a thin portion of its edge is exposed along the edge of said GUI, the exposed edge being the edge of the selected container object that was closest to the central portion of said GUI prior to said selection event.